BRUHATH BENGALORE MAHANAGARA PALIKE

Byatarayanapura Division

Agreement No.BBMP/EE/BTP/AG/120/2020-21 Date- 29/09/2020

Work Order No. BBMP/EE/BTP/WO/120/2020-21 Date- 29/09/2020

Job Code / Indent No :- 005-20-000094

Name of Work:Improvements to Roads and drains works at Kattigenahalli Main and Cross, Sirinagara, Niranthara layout, SriKrishna Garden, ShivaShankar layout, Varaha layout, Bindu layout and Surrounding areas in Ward No-05

Name of Agency: Sri. B B Umesha (M/s SMLP Asphalts)

Modified Schedule-B

Item No	Description of Item	unit	Qty	Rate	In words
1	Removing and Refixing stone slabs of drains and pointing in C.M(1:3) with all lead and lift and as per the directioon of Engineer in -charge	Sqm	1647.18	116.00	One Hundred And Sixteen Only
2	KSRRB300 - Excavation for road, drains and similar works ,KSRRB300-1 : Earthwork excavation by manual means in ordinary soil involving as average horizontal throw upto 2 mters and an average lifts upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications with all lead and lift and as per the direction of Engineer in-charge.	Cum			
	Quantity Up to 125%	Cum	1322.85	217.00	Two Hundred And Seventeen Only
	Quantity Above 125%	Cum	17.40	217.00	Two Hundred And Seventeen Only
3	Providing granite slabs of selected quality roughly dressed having a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete with all lead and lift and as per the direction of Engineer in-charge.	Sqm	2009.51	779.00	Seven Hundred And Seventy Nine Only
4	KSRB M2100-10 : Providing and laying plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89 cum and fine aggregtes @ 0.46cum, in foundation machanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labours, HOM curing, from works, scffolding and centering complete as per specifications.	Cum	15.02	5692.00	Five Thousand Six Hundred And Ninety Two Only
5	KSRB 5.2-3: Providing and constructing granite / trap / baslt size stone masonary in foundation with cement mortar , stone hammered dressed in course not less than 20 cms high, bond stones at 2m. Apart in each course including cost materials , labours , curing complete as per specifications.	Cum	38.86	5114.00	Five Thousand One Hundred And Fourteen Only
6	KSRB 4-1.6: Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC at 240kgs, with 20mm and down size granite metal coarse aggregates at 0.878 cum and fine aggregates at 0.53cum , mechine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted in foundation , plinth and cills, including cost of materials, labours, HOM curing complete as per	Cum	463.41	6034.00	Six Thousand Thirty Four Only
7	KSRB 5-14: providing and constructing load bearing wall with solid concrete blocks of size 400mm*150mm*200mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00N/mm2 confirming to IS 2185(part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of materials , labour charges , scaffolding, curing, complete as per specifications.	Sqm	3536.00	1028.00	One Thousand Twenty Eight Only
8	Providing and Fixing RCC pre cast covering Slab of 100mm thick for drains in cement concrete M25 using graded granite jelly 20mm and down size with steel reinforecement , inclunding form work, lift charges, curing and concrete finishined surfaces on both side etc., complete as per drawing and the directions of Engineer in-charge.	Sqm	4464.72	2453.00	Two Thousand Four Hundred And Fifty Three Only
9	Providing and Fixing pre cast covering Slab 250mm thick made out of M25 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of all materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge.	Sqm	83.09	5688.00	Five Thousand Six Hundred And Eighty Eight Only

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	Description of Item	unit	Qty	Rate	In words
10	KSRRB M300-14: Excavation for roadwork in soil with hydralic excavation of 0.9 cum bucket capacity including cutting and laoding in tippers,trimming bottom and side slopes , in accordance with requiement of lines , grades and cross section , and transporting to the embankment location to a lead of 1 km and complete as per specifications with all lead and lift and as per the direction of Engineer in-charge.	Cum	10303.15	60.00	Sixty Only
11	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing in a mechanical mix plant at OMC , Carriage of mixed materials to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications with all lead and lift and as per direction of Engineer In-charge	Cum	4756.36	2,095.00	Two Thousand Ninety Five Only
12	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. with all lead and lift and as per direction of Engineer In-charge	Cum	7202.50	2,101.00	Two Thousand One Hundred And One Only
13	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and sparying primer at the rte of 0.60 kg /sqm using mechanical means complete as per specifications with all lead and lift and as per the direction of Engineer in-charge	Sqm	35070.64	30.00	Thirty Only
14	KSRRB 500-2 : Cleaning the existing black topped surfce with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to receive bituminous treatment including cost of material, labour, HOM curing,	Sqm	4863.32	6.00	Six Only
15	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of materials , labour, HOM complete as per specification with all lead and lift and as per the direction of Engineer in-charge.	Sqm	39933.66	13.00	Thirteen Only
16	KSRRB M500-17. Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 70mm) with 4.5% VG-30 bitumen with all lead and lift and as per the direction of Engineer in-charge.	Cum	1750.70	6,926.00	Six Thousand Nine Hundred And Twenty Six Only
17	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP- 53-2015.do-using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminous binder consisting of 4.97% ofVG-30 bitumen (60/70 grade} and 0.43% of plastomeric thermoplastics (waste plastic) with all lead and lift and as per the direction of Engineer in-charge.	Cum	1596.87	8,140.00	Eight Thousand One Hundred And Forty Only
18	KSRRB M800-13. Road Marking with Hot Applied 'Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications with all lead and lift and as per the direction of Engineer in-charge	Sqm	1200.54	475.00	Four Hundred And Seventy Five Only

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	Description of Item	unit	Qty	Rate	In words
19	KSRRB M800-35.Supply and installtion of mould shank raised pavement marker made of pplycarbonate ans ABS(Acerylonitrile Butadiene sytrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of thr light entering the lens face and shall support a load of 16000kg tested in accordance to specifications of category A of Morth circular no RW/NH/33023/10-97-DO IIIDt.11.06.1997. The height ,width and length shall not exceed 50mm ,10mm, and a02mm and with minimum reflective area of 13sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylinder shank, (of diameter not less then 19mm and height not less then 30mm) from the body is to be a minimum value of 500kg . Fixing will beby drilling holes on the road for the shanks togo inside, without nails and using epoxy resin based adhesive as per manufactures recommandation and complete as direct by the engineer with lead and lift and as per direction of engineer in-charge.	nos	1022.00	375.00	Three Hundred And Seventy Five Only
20	supply and fixing of Reteo Reflective Single Arrow Road Name Signboard of size 1600mm*900mm made out of retro reflective sheetting conforming to type XI standards of ASTM D 4956-09 & as per IRC 67-2012 for full back ground of bule colour and white letters and fixed over thick Aluminium Composite Materials sheet having minimum 0.5mm thick Aliminum skin on both sides with back side painted grey colour and fixed over bacj support frames SS angle of 15mm*20mm*1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 no of vertical posts of 50mm OD stainless pipe of 202 grade firmly fixed to the ground by means of properly designedfoundation of size 450mm*450mm*600mm in 1:1.5:3 ratio cement concrete. complete as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for type XIretro reflective sheeting from the sheeting manufacture and a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted bythe contractor for technical qualification in the tender with all lead and lift and as per direction of engineer in-charge.	Sqm			
	Quantity Up to 125%	Sqm	12.60	14,799.00	One Thousand Four Hundred Fifteen Rupees And Ten Paisa Only
	Quantity Above 125%	Sqm	11.88	14,799.00	One Thousand Four Hundred Fifteen Rupees And Ten Paisa Only
E1	Providing and laying reinforced cement concrete pipe NP3 for culverts including pointing ends, and fixing collars with cement mortar 1:2 including cost of all materials, labour, curing, including cost of materials, labour, HOM complete as per specifications.	mts	31.50	2873.78	Two Thousand Eight Hundred And Seventy Three And Cents Seventy Eight Only

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Executive Engineer
Byatarayanapura Division
BBMP Bangalore